ESMX Point to Point Loop Designer

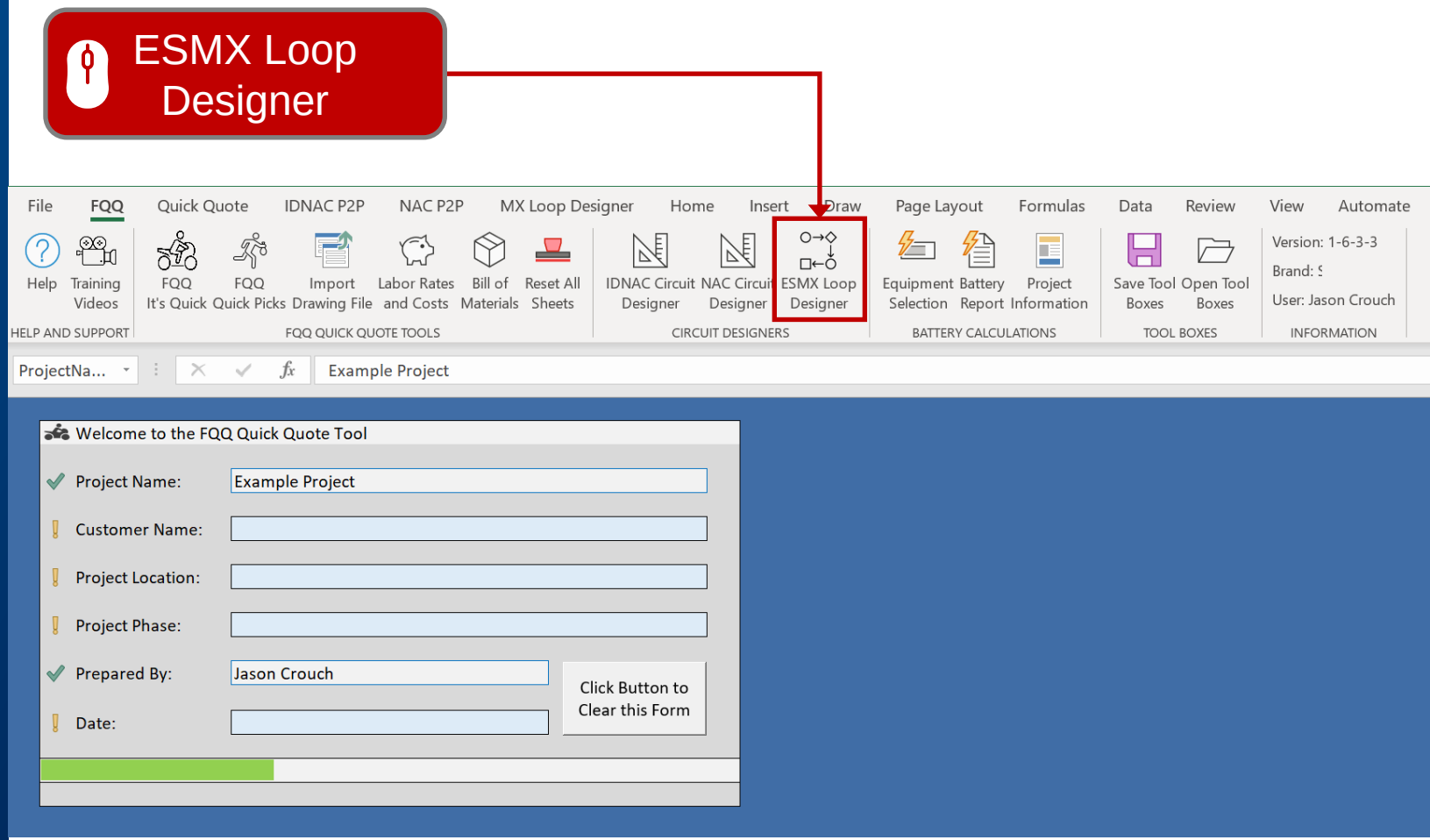
Quick Start Guide

The power behind **your mission**

Johnson Controls

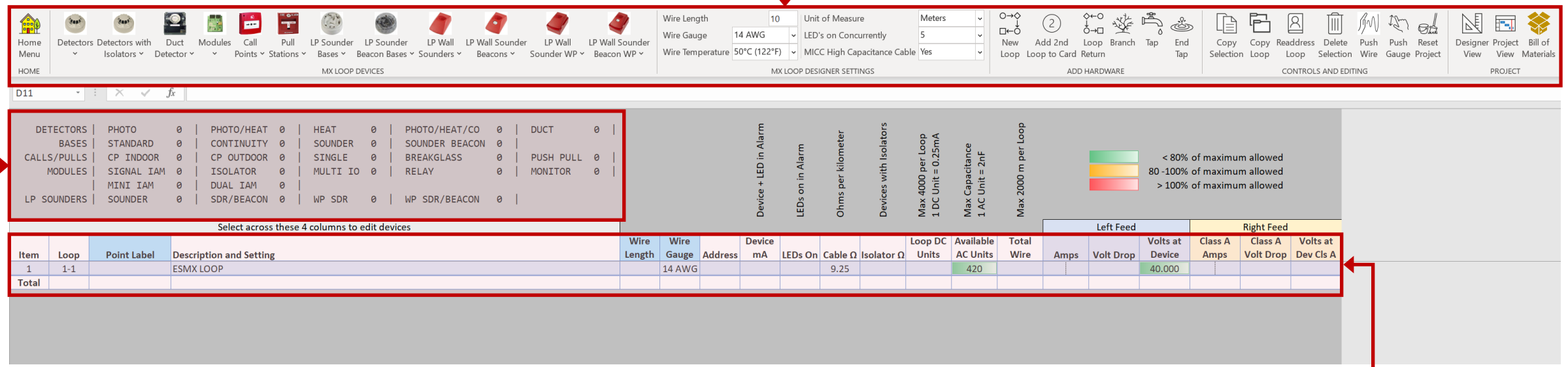
Getting Started

Click ESMX Loop Designer in the Ribbon of the FQQ Home Menu.



ESMX Point to Point Loop Designer

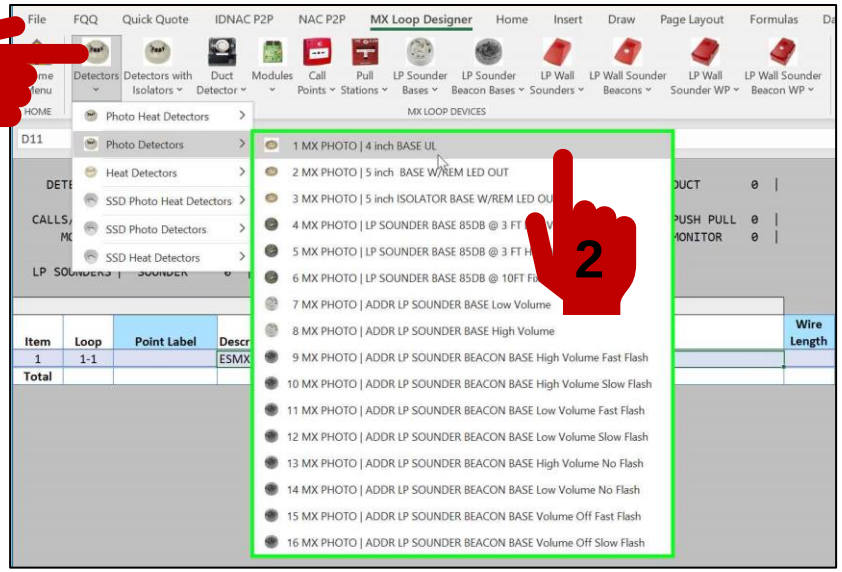
ESMX Loop Designer Ribbon Controls

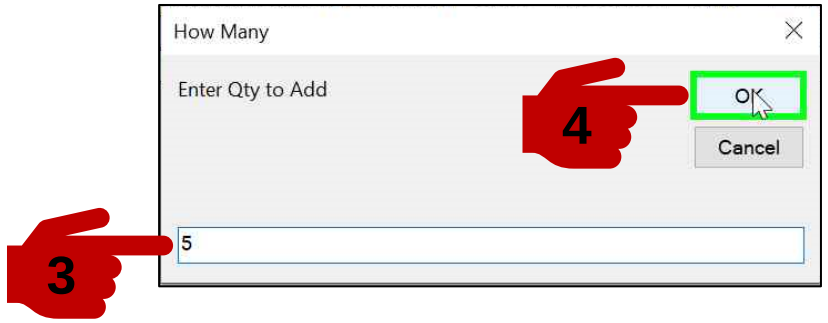


ESMX Loop Designer Device Counts

ESMX Loop Designer Grid

Adding Devices





1) Select Device Type
2) Select Model
3) Enter Quantity
4) Click OK
5) Devices will be added

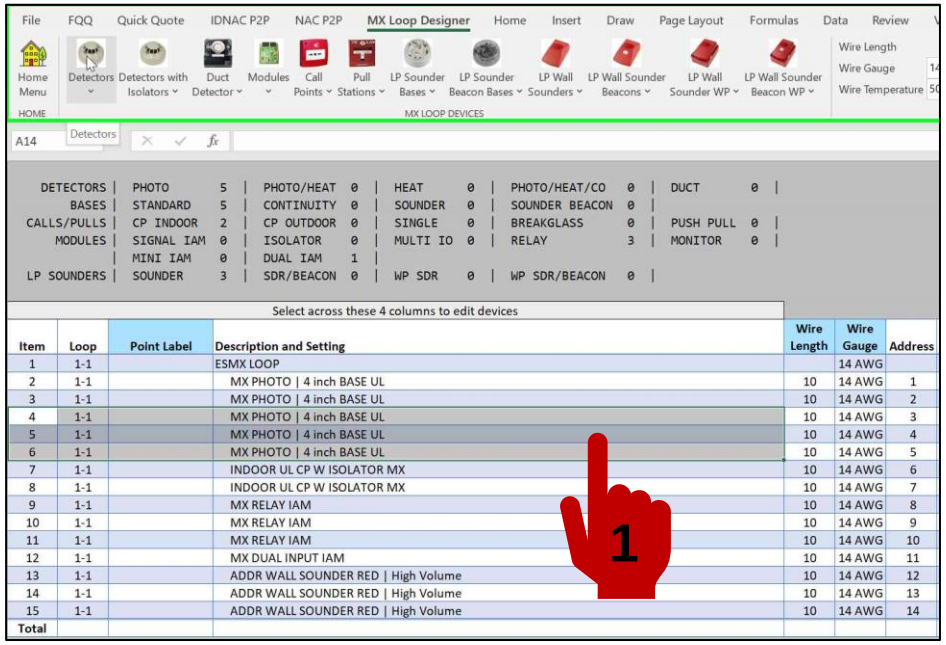
```
DETECTORS |  PHOTO       5  |  PHOTO/HEAT  0  |  HEAT       0  |  PHOTO/HEAT/CO   0  |  DUCT       0  |
    BASES |  STANDARD    5  |  CONTINUITY  0  |  SOUNDER    0  |  SOUNDER BEACON  0  |
CALLS/PULLS | CP INDOOR   0  |  CP OUTDOOR  0  |  SINGLE     0  |  BREAKGLASS      0  |  PUSH PULL  0  |
  MODULES |  SIGNAL IAM  0  |  ISOLATOR    0  |  MULTI IO   0  |  RELAY           0  |  MONITOR    0  |
          |  MINI IAM    0  |  DUAL IAM    0  |
LP SOUNDERS | SOUNDER      0  |  SDR/BEACON  0  |  WP SDR     0  |  WP SDR/BEACON   0  |
```

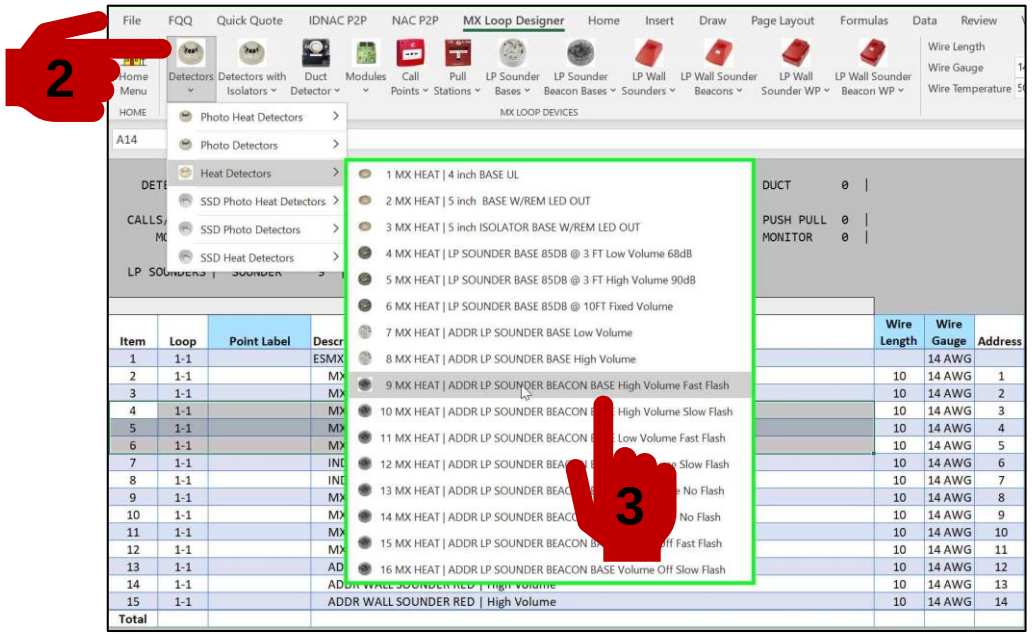
< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

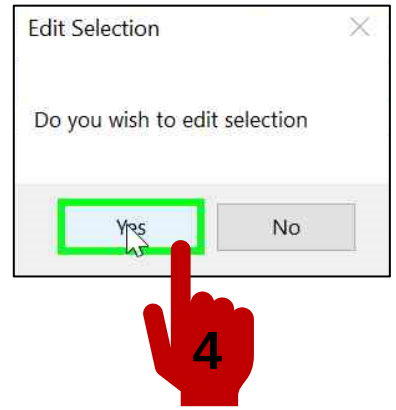
Select across these 4 columns to edit devices

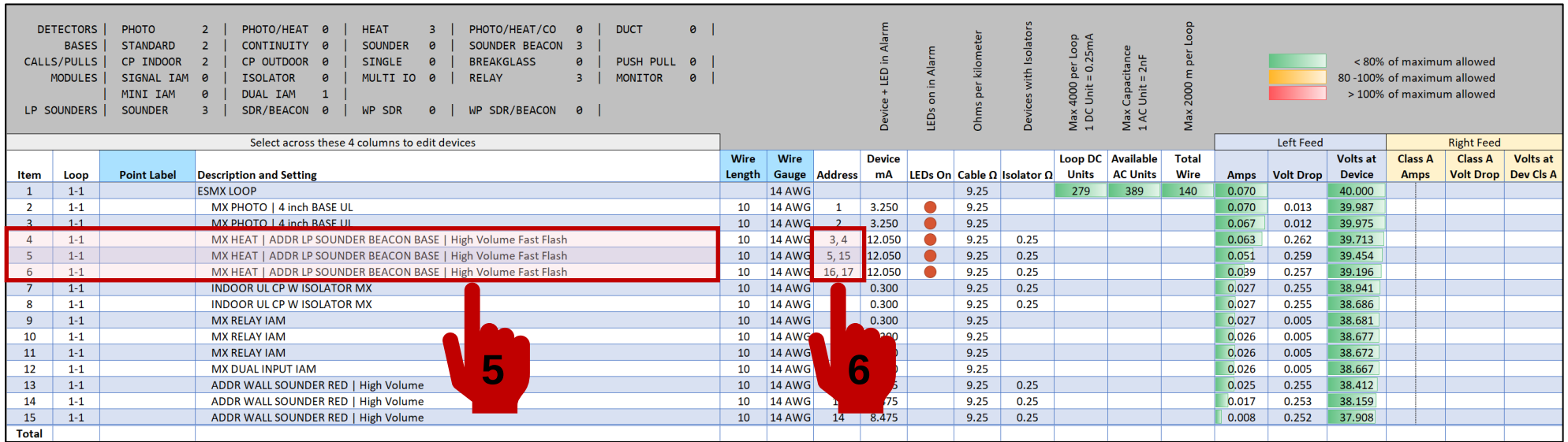
Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
											Device + LED in Alarm	LEDs on in Alarm	Ohms per kilometer	Devices with Isolators	Max 4000 per Loop 1 DC Unit = 0.25mA	Max Capacitance 1 AC Unit = 2nF	Max 2000 m per Loop		
1	1-1		ESMX LOOP		14 AWG				9.25		65	410	50	0.016		40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	1	3.250		9.25					0.016	0.003	39.997			
3	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	2	3.250		9.25					0.013	0.002	39.995			
4	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	3	3.250		9.25					0.010	0.002	39.993			
5	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	4	3.250		9.25					0.007	0.001	39.992			
6	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	5	3.250		9.25					0.003	0.001	39.991			
Total																			

Editing Devices





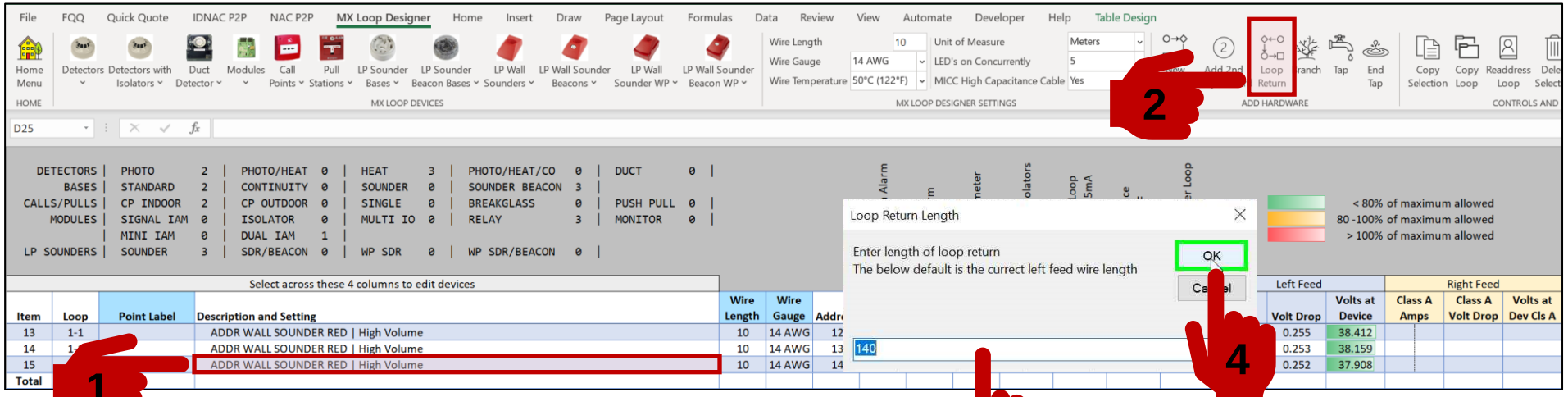




1) Select Devices to Edit. Must Select Columns A-D
2) Select Device
3) Select Model
4) Click Yes to Edit
5) Devices Changed
6) Address Updated as required

Johnson Controls

Adding a Loop Return



1) Select Loop End
2) Click Loop Return
3) Enter Loop Return Wire Length. FQQ will auto calculate a default value based on the left feed wire length
4) Click OK
5) Loop Return Added
6) Right Feed Calculations are now shown

DETECTORS | PHOTO 2 | PHOTO/HEAT 0 | HEAT 3 | PHOTO/HEAT/CO 0 | DUCT 0 |
BASES | STANDARD 2 | CONTINUITY 0 | SOUNDER 0 | SOUNDER BEACON 3 |
CALLS/PULLS | CP INDOOR 2 | CP OUTDOOR 0 | SINGLE 0 | BREAKGLASS 0 | PUSH PULL 0 |
MODULES | SIGNAL IAM 0 | ISOLATOR 0 | MULTI IO 0 | RELAY 3 | MONITOR 0 |
| MINI IAM 0 | DUAL IAM 1 |
LP SOUNDERS | SOUNDER 3 | SDR/BEACON 0 | WP SDR 0 | WP SDR/BEACON 0 |

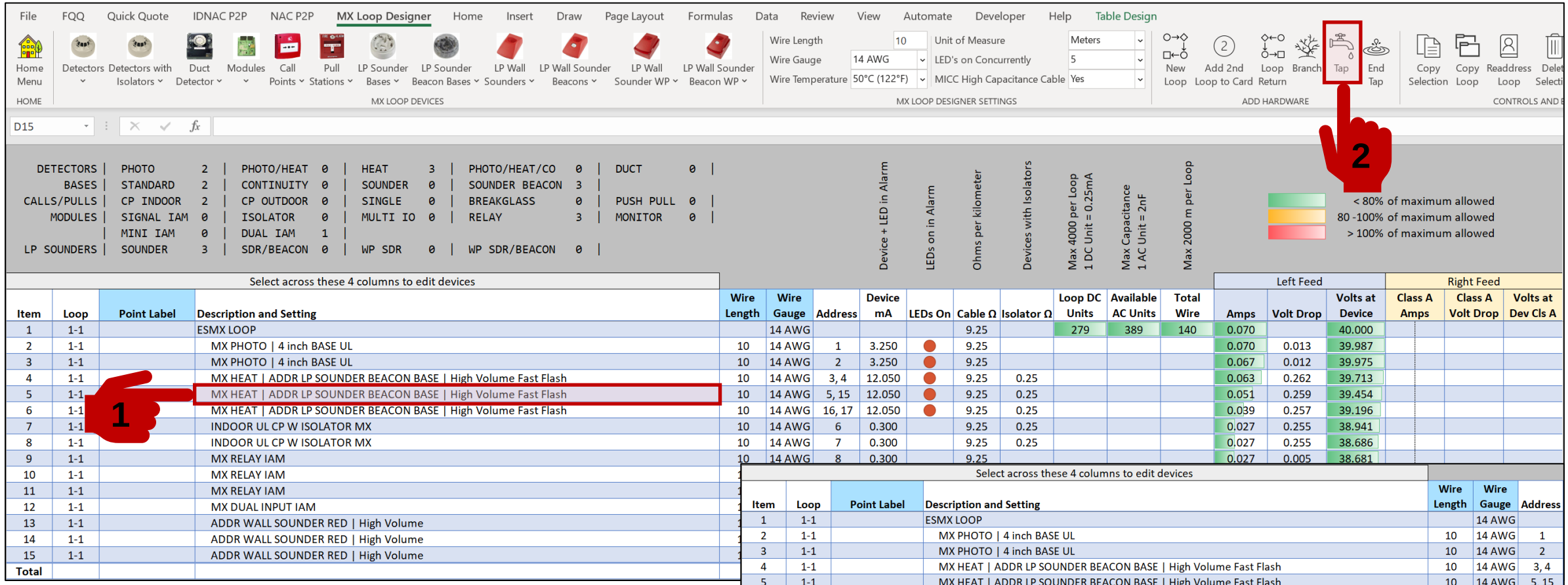
< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On (Device + LED in Alarm)	Cable Ω (Ohms per kilometer)	Isolator Ω (Devices with Isolators)	Loop DC Units (Max 4000 per Loop 1 DC Unit = 0.25mA)	Available AC Units (Max Capacitance 1 AC Unit = 2nF)	Total Wire (Max 2000 m per Loop)	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP		14 AWG				9.25		279	375	280	0.070		40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	1	3.250	●	9.25					0.070	0.013	39.987	0.003	0.001	37.731
3	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	2	3.250	●	9.25					0.067	0.012	39.975	0.007	0.001	37.731
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	3, 4	12.050	●	9.25	0.25				0.063	0.262	39.713	0.019	0.253	37.732
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	5, 15	12.050	●	9.25	0.25				0.051	0.259	39.454	0.031	0.256	37.986
6	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	16, 17	12.050	●	9.25	0.25				0.039	0.257	39.196	0.043	0.258	38.242
7	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	6	0.300		9.25	0.25				0.027	0.255	38.941	0.043	0.258	38.499
8	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	7	0.300		9.25	0.25				0.027	0.[illegible]	38.686	0.043	0.258	38.757
9	1-1		MX RELAY IAM	10	14 AWG	8	0.300		9.25					0.027		[illegible].681	0.044	0.008	39.015
10	1-1		MX RELAY IAM	10	14 AWG	9	0.300		9.25					0.026		[illegible].677	0.044	0.008	39.023
11	1-1		MX RELAY IAM	10	14 AWG	10	0.300		9.25					0.026	0.[illegible]	38.672	0.044	0.008	39.032
12	1-1		MX DUAL INPUT IAM	10	14 AWG	11	0.250		9.25					0.026	0.005	38.667	0.044	0.008	39.040
13	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	12	8.475		9.25	0.25				0.025	0.255	38.412	0.053	0.260	39.048
14	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	13	8.475		9.25	0.25				0.017	0.253	38.159	0.061	0.261	39.308
15	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	14	8.475		9.25	0.25				0.008	0.252	37.908	0.070	0.431	39.569
16	1-1		MX LOOP RETURN	140	14 AWG				9.25								0.070		40.000
Total																			

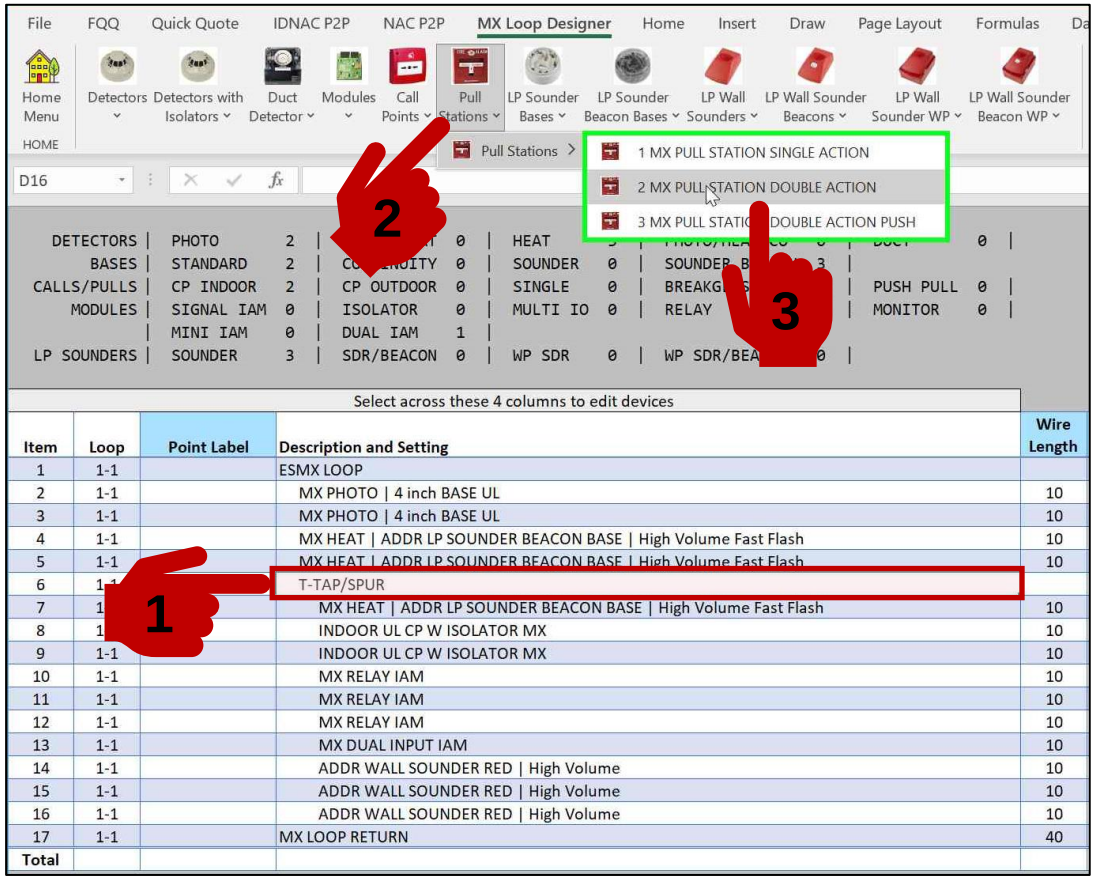
5
6

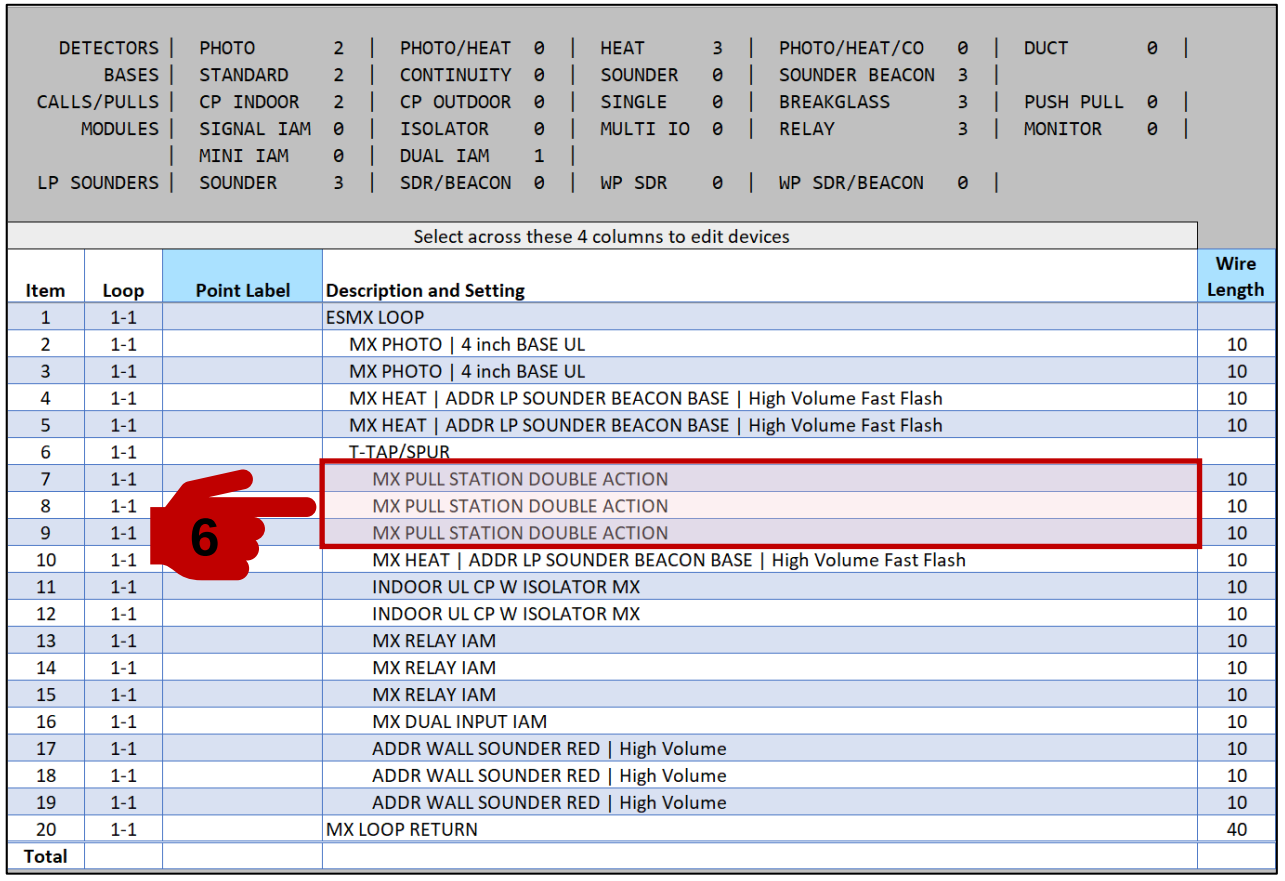
Adding a T-TAP / SPUR

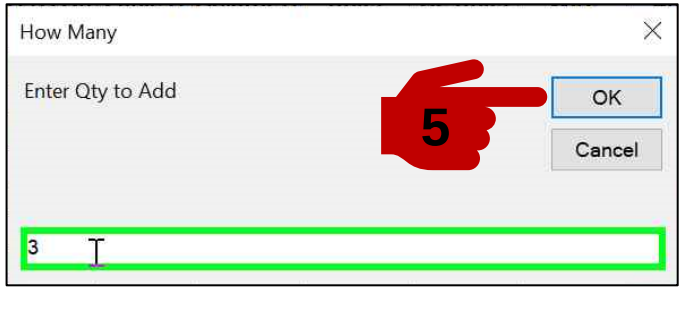


1) Select a device as an insertion point
2) Select Tap
3) T-TAP / SPUR inserted
4) Note: Devices on T-TAP / SPUR are inserted

Adding Devices to a T-TAP / SPUR

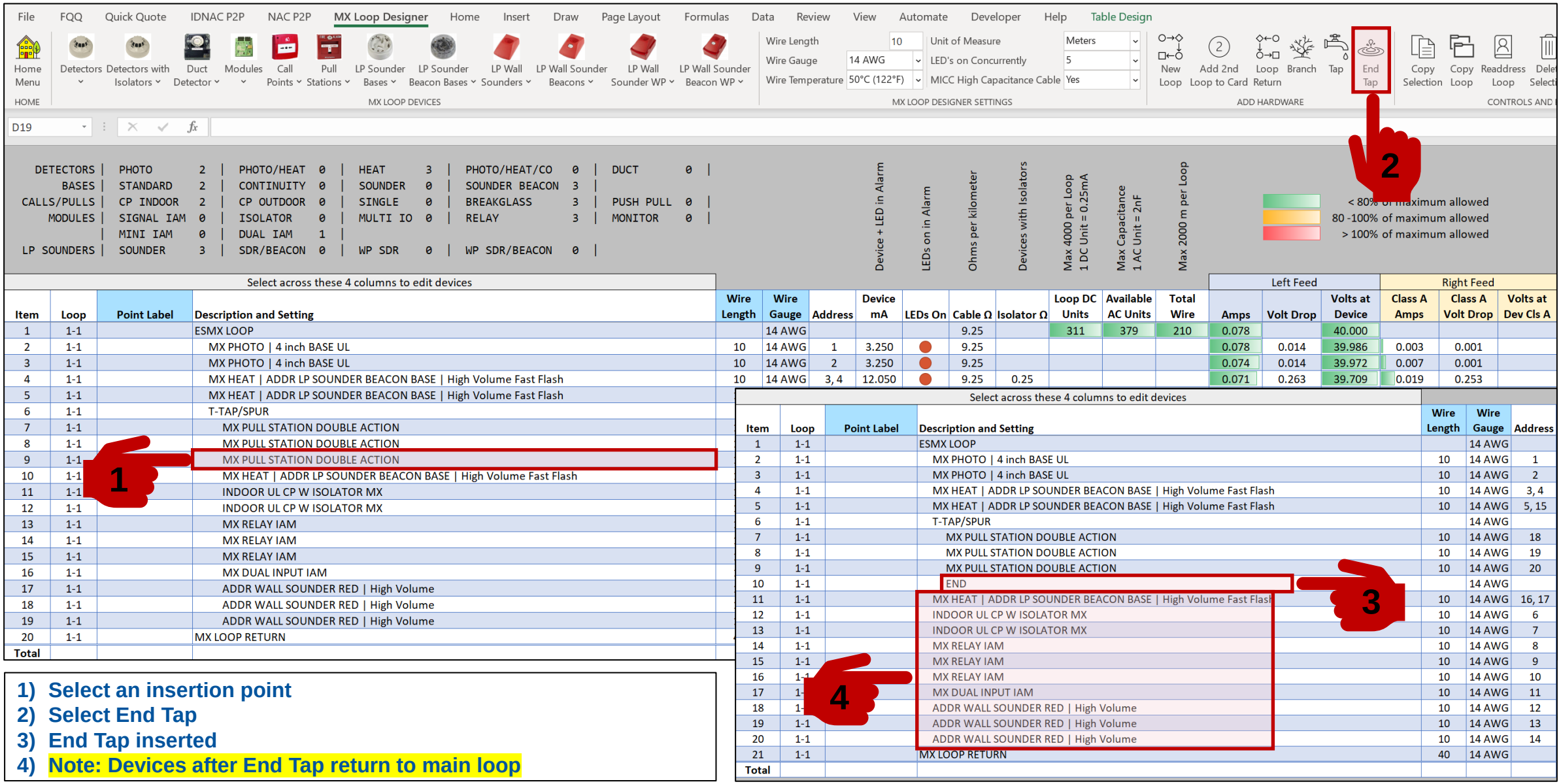






1) Select T-TAP / SPUR
2) Select Device
3) Enter Model
4) Enter Quantity
5) Click OK
6) Devices will be added

Ending a T-TAP / SPUR



1) Select an insertion point
2) Select End Tap
3) End Tap inserted
4) Note: Devices after End Tap return to main loop

Example of a T-TAP / SPUR off a T-TAP / SPUR

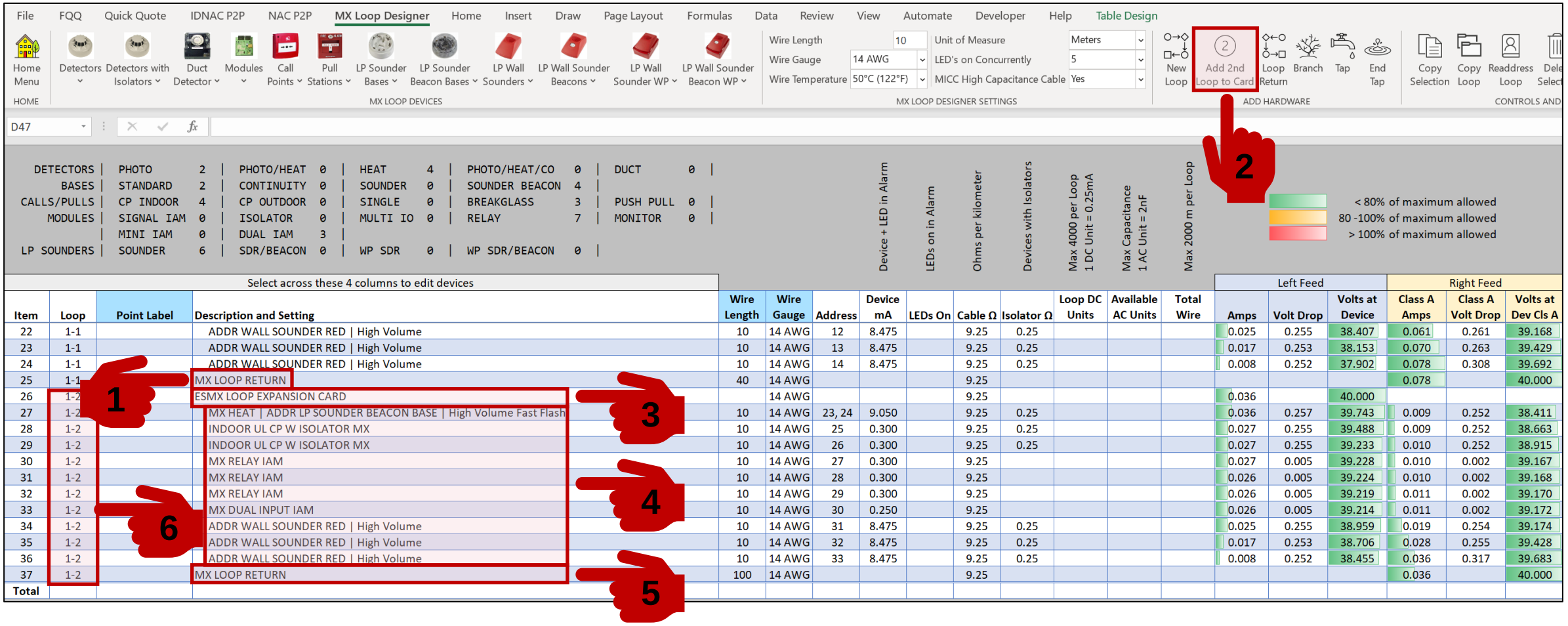
DETECTORS	PHOTO	2	PHOTO/HEAT	0	HEAT	3	PHOTO/HEAT/CO	0	DUCT	0	
BASES	STANDARD	2	CONTINUITY	0	SOUNDER	0	SOUNDER BEACON	3			
CALLS/PULLS	CP INDOOR	2	CP OUTDOOR	0	SINGLE	0	BREAKGLASS	3	PUSH PULL	0	
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	4	MONITOR	0	
	MINI IAM	0	DUAL IAM	2							
LP SOUNDERS	SOUNDER	3	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0			

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address
1	1-1		ESMX LOOP		14 AWG	
2	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	1
3	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	2
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	3, 4
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	5, 15
6	1-1		T-TAP/SPUR		14 AWG	
7	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG	18
8	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG	19
9	1-1		T-TAP/SPUR		14 AWG	
10	1-1		MX RELAY IAM	10	14 AWG	21
11	1-1		MX DUAL INPUT IAM	10	14 AWG	22
12	1-1		END		14 AWG	
13	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG	20
14	1-1		END		14 AWG	
15	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	16, 17
16	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	6
17	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	7
18	1-1		MX RELAY IAM	10	14 AWG	8
19	1-1		MX RELAY IAM	10	14 AWG	9
20	1-1		MX RELAY IAM	10	14 AWG	10
21	1-1		MX DUAL INPUT IAM	10	14 AWG	11
22	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	12
23	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	13
24	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	14
25	1-1		MX LOOP RETURN	40	14 AWG	
Total						

1) Devices connected to Main Loop
2) Devices connected to T-Tap / Spur 1
3) Devices connected to T-Tap / Spur 2

Example of Adding a Second Isolated Loop Card to the Main Loop Card

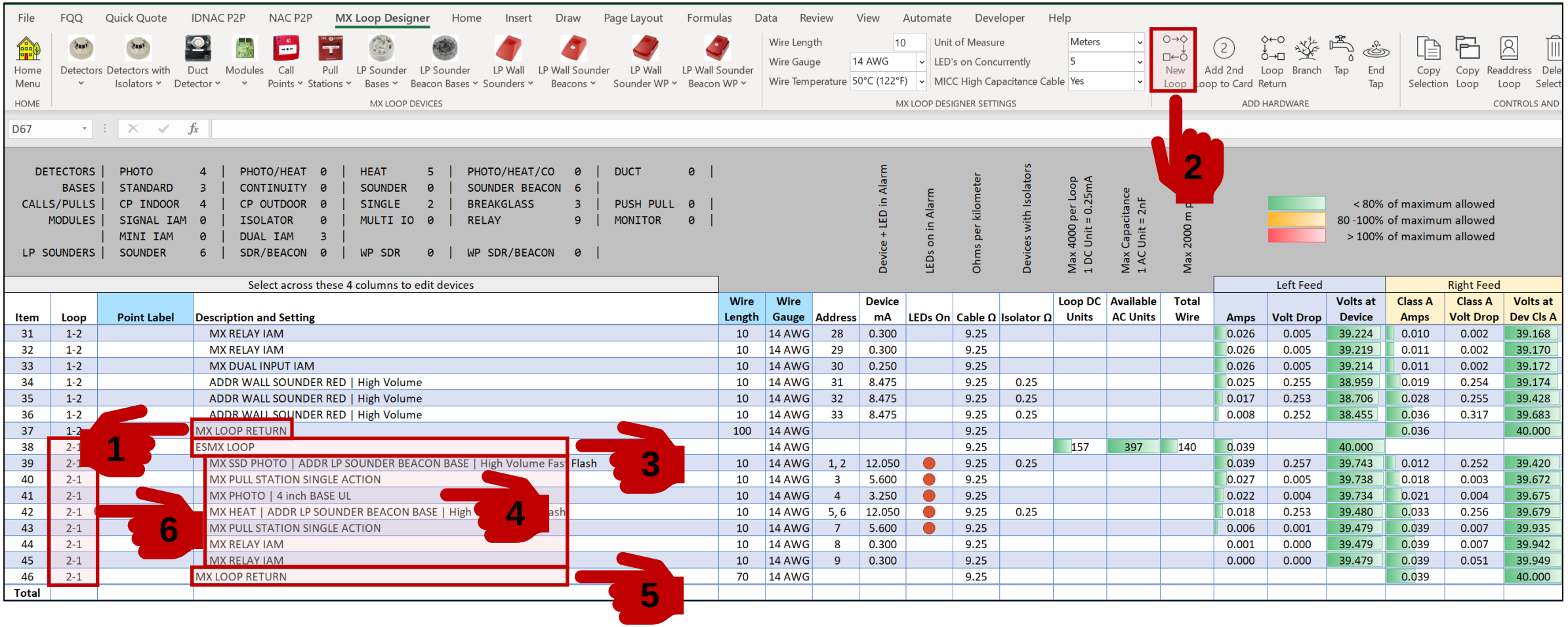


Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
22	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	12	8.475		9.25	0.25				0.025	0.255	38.407	0.061	0.261	39.168
23	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	13	8.475		9.25	0.25				0.017	0.253	38.153	0.070	0.263	39.429
24	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	14	8.475		9.25	0.25				0.008	0.252	37.902	0.078	0.308	39.692
25	1-1		MX LOOP RETURN	40	14 AWG				9.25								0.078		40.000
26	1-2		ESMX LOOP EXPANSION CARD		14 AWG				9.25					0.036		40.000			
27	1-2		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	23, 24	9.050		9.25	0.25				0.036	0.257	39.743	0.009	0.252	38.411
28	1-2		INDOOR UL CP W ISOLATOR MX	10	14 AWG	25	0.300		9.25	0.25				0.027	0.255	39.488	0.009	0.252	38.663
29	1-2		INDOOR UL CP W ISOLATOR MX	10	14 AWG	26	0.300		9.25	0.25				0.027	0.255	39.233	0.010	0.252	38.915
30	1-2		MX RELAY IAM	10	14 AWG	27	0.300		9.25					0.027	0.005	39.228	0.010	0.002	39.167
31	1-2		MX RELAY IAM	10	14 AWG	28	0.300		9.25					0.026	0.005	39.224	0.010	0.002	39.168
32	1-2		MX RELAY IAM	10	14 AWG	29	0.300		9.25					0.026	0.005	39.219	0.011	0.002	39.170
33	1-2		MX DUAL INPUT IAM	10	14 AWG	30	0.250		9.25					0.026	0.005	39.214	0.011	0.002	39.172
34	1-2		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	31	8.475		9.25	0.25				0.025	0.255	38.959	0.019	0.254	39.174
35	1-2		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	32	8.475		9.25	0.25				0.017	0.253	38.706	0.028	0.255	39.428
36	1-2		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	33	8.475		9.25	0.25				0.008	0.252	38.455	0.036	0.317	39.683
37	1-2		MX LOOP RETURN	100	14 AWG				9.25								0.036		40.000
Total																			

1) Select an insertion point
2) Select Add 2nd Loop to Card
3) 2nd Loop Card added to Main Loop Card
4) Add Devices
5) Add a Loop Return for a Class A Circuit
6) Note: Loop Numbering Loop 1-2

Johnson Controls

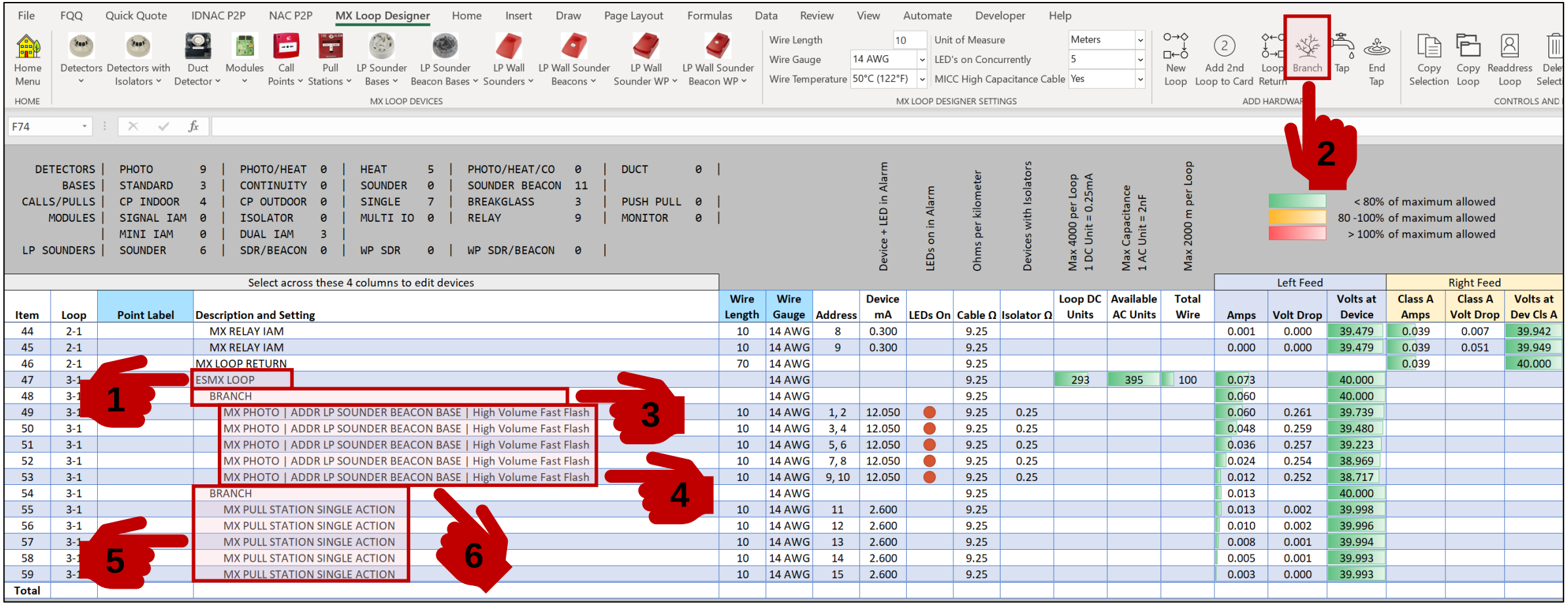
Adding a New Loop



1) Select an insertion point
2) Select New Loop
3) New Loop Added
4) Add Devices
5) Add a Loop Return for a Class A Circuit
6) Note: Loop Numbering Loop 2-1

Johnson Controls

Example of Adding Branches for more than one Class B Circuit

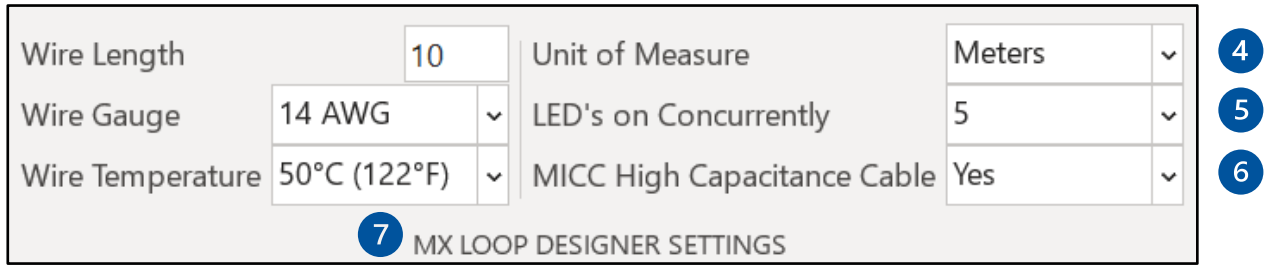


1) Select an insertion point
2) Select Branch
3) Branch Added
4) Add Devices
5) Second Branch
6) Note: Loop Return is not added to the end of a branch

Johnson Controls

ESMX
Loop Designer Settings

ESMX Loop Designer Settings



1. Default Wire Length used when adding new devices.

2. Default Wire Gauge used when adding new devices.

3. Default Wire Temperature setting for project.
   - 75°C (167°F)
   - 50°C (122°F)

4. Unit of Measure for wiring distances.
   - Feet, Resistance shown Ω / 1000ft.
   - Meters, Resistance shown Ω / km.

5. LEDs on Concurrently. This will determine the maximum number of LEDs turned on in Alarm per loop, as per the configuration software settings.
   - 5
   - 10
   - 20
   - 30

6. Select if MICC High Capacitance Cable is used.
   - Yes, Reduces Available AC Units.
   - No

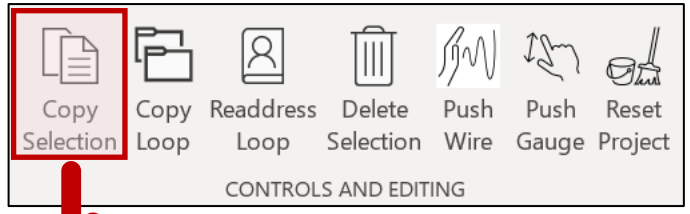
7. All Settings are saved as defaults when saving a project.

Johnson Controls

ESMX Loop Designer Controls and Editing

Controls and Editing – Copy Selection

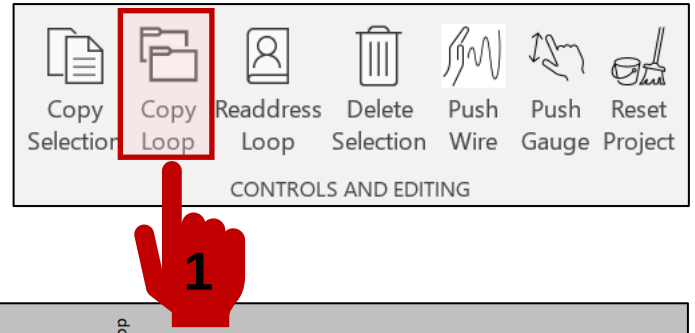
1) Highlight Selection to Copy
2) Click Copy Selection
3) Select 1 to Insert or 2 to Add to End and Press OK
4) If 1 is Selected, Enter the Item No you wish to copy the selection below and press OK



| | | |

Controls and Editing – Copy Loop

1) Click Copy Loop
2) Enter the ESMX Loop Number to Copy
3) Press OK
4) Click Yes to Confirm
5) A New Loop will be copied to the end of the ESMX Loop Designer Grid
6) NOTE: In the below Example Loop 4 will be created



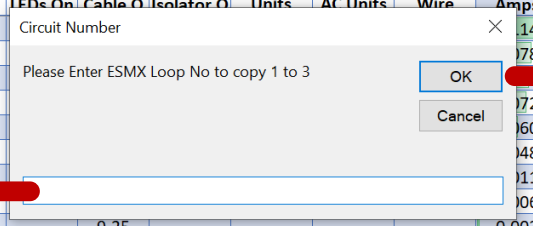
DETECTORS	PHOTO	9	PHOTO/HEAT	0	HEAT	5	PHOTO/HEAT/CO	0	DUCT	0			
BASES	STANDARD	3	CONTINUITY	0	SOUNDER	0	SOUNDER BEACON	11					
CALLS/PULLS	CP INDOOR	4	CP OUTDOOR	0	SINGLE	7	BREAKGLASS	3	PUSH PULL	0			
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	9	MONITOR	0			
	MINI IAM	0	DUAL IAM	3									
LP SOUNDERS	SOUNDER	6	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0					

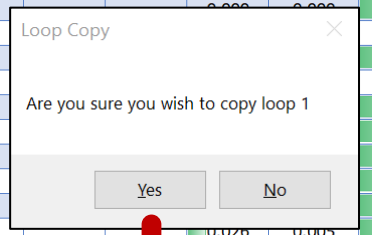
Device + LED in Alarm | LEDs on in Alarm | Ohms per kilometer | Devices with Isolators | Max 4000 per Loop 1 DC Unit = 0.25mA | Max Capacitance 1 AC Unit = 2nF | Max 2000 m per Loop

< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

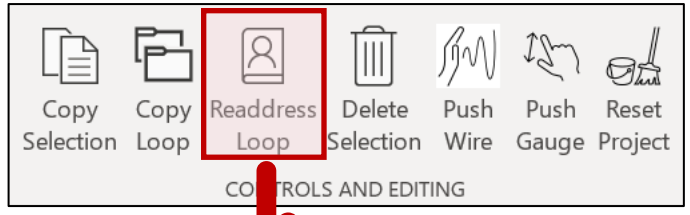
Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP		14 AWG									.14		40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	1	3.250							.078		39.986	0.003	0.001	37.838
3	1-1		MX PHOTO | 4 inch BASE UL	10	14 AWG	2	3.250									39.972	0.007	0.001	37.838
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	3, 4	12.050							.072		39.708	0.019	0.253	37.840
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	5, 15	12.050							.060		39.447	0.031	0.250	38.093
6	1-1		T-TAP/SPUR		14 AWG									.048		39.447	0.042	0.008	38.343
7	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG	1	.600							.011	0.002	39.445	0.011	0.002	38.341
8	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG									.006	0.001	39.444	0.006	0.001	38.340
9	1-1		T-TAP/SPUR		14 AWG				9.25					0.003		39.444	0.003		38.340
10	1-1		MX RELAY IAM	10	14 AWG		.00		9.25					0.001	0.000	39.444	0.001	0.000	38.340
11	1-1		MX DUAL INPUT IAM	10	14 AWG	22	0.250		9.25							39.444	0.000	0.000	38.340
12	1-1		END		14 AWG				9.25										
13	1-1		MX PULL STATION DOUBLE ACTION	10	14 AWG	20	2.600		9.25							39.444	0.003	0.000	38.339
14	1-1		END		14 AWG				9.25										
15	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	10	14 AWG	16, 17	9.050		9.25	0.25						39.191	0.051	0.259	38.351
16	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	6	0.300		9.25	0.25						38.936	0.051	0.259	38.610
17	1-1		INDOOR UL CP W ISOLATOR MX	10	14 AWG	7	0.300		9.25	0.25						38.681	0.052	0.260	38.870
18	1-1		MX RELAY IAM	10	14 AWG	8	0.300		9.25							38.676	0.052	0.010	39.129
19	1-1		MX RELAY IAM	10	14 AWG	9	0.300		9.25							38.671	0.052	0.010	39.139
20	1-1		MX RELAY IAM	10	14 AWG	10	0.300		9.25					0.026	0.005	38.666	0.053	0.010	39.148
21	1-1		MX DUAL INPUT IAM	10	14 AWG	11	0.250		9.25					0.026	0.005	38.661	0.053	0.010	39.158
22	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	12	8.475		9.25	0.25				0.025	0.255	38.407	0.061	0.261	39.168
23	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	13	8.475		9.25	0.25				0.017	0.253	38.153	0.070	0.263	39.429
24	1-1		ADDR WALL SOUNDER RED | High Volume	10	14 AWG	14	8.475		9.25	0.25				0.008	0.252	37.902	0.078	0.308	39.692
25	1-1		MX LOOP RETURN	40	14 AWG				9.25								0.078		40.000





Controls and Editing – Readdress Loop

1) Click Readdress Loop
2) Enter the ESMX Loop Number to Readdress
3) Press OK
4) Click Yes to Confirm
5) NOTE: Before, Example based on Loop 1
6) NOTE: After, Devices have been readdressed sequentially

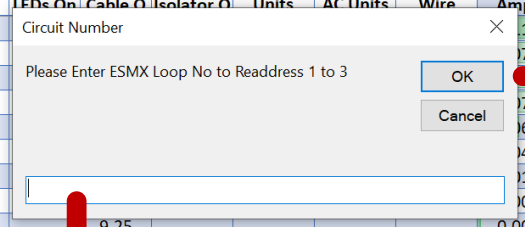


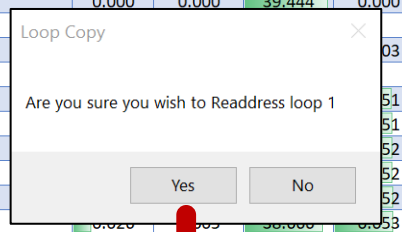
DETECTORS	PHOTO	9	PHOTO/HEAT	0	HEAT	5	PHOTO/HEAT/CO	0	DUCT	0		
BASES	STANDARD	3	CONTINUITY	0	SOUNDER	0	SOUNDER BEACON	11				
CALLS/PULLS	CP INDOOR	4	CP OUTDOOR	0	SINGLE	7	BREAKGLASS	3	PUSH PULL	0		
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	9	MONITOR	0		
	MINI IAM	0	DUAL IAM	3								
LP SOUNDERS	SOUNDER	6	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0				

< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

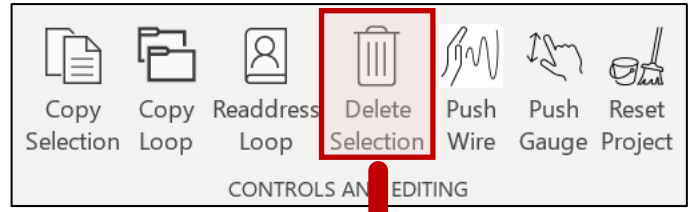
Item	Loop	Point Label	Description and Setting	Address	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP			14 AWG											40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	1	10	14 AWG	1	3.250									39.986	0.003	0.001	37.838
3	1-1		MX PHOTO | 4 inch BASE UL	2	10	14 AWG	2	3.250									39.972	0.007	0.001	37.838
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	3, 4	10	14 AWG	3, 4	12.050									39.708	0.019	0.253	37.840
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	5, 6	10	14 AWG	5, 15	12.050									39.447	0.031	0.250	38.093
6	1-1		T-TAP/SPUR			14 AWG											39.447	0.042	0.008	38.343
7	1-1		MX PULL STATION DOUBLE ACTION	7	10	14 AWG	18	5.600									39.445	0.011	0.002	38.341
8	1-1		MX PULL STATION DOUBLE ACTION	8	10	14 AWG	19	2.600									39.444	0.006	0.001	38.340
9	1-1		T-TAP/SPUR			14 AWG				9.25					0.003		39.444	0.003		38.340
10	1-1		MX RELAY IAM	9	10	14 AWG	21	0.300							0.001	0.000	39.444	0.001	0.000	38.340
11	1-1		MX DUAL INPUT IAM	10		14 AWG	22	0.250							0.000	0.000	39.444	0.000	0.000	38.340
12	1-1		END																	
13	1-1		MX PULL STATION DOUBLE ACTION	11		14 AWG	20	2.600										0.003	0.000	38.339
14	1-1		END			14 AWG														
15	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	12, 13	10	14 AWG	16, 17	9.050		9.25	0.25							0.051	0.259	38.351
16	1-1		INDOOR UL CP W ISOLATOR MX	14	10	14 AWG	6	0.300		9.25	0.25							0.051	0.259	38.610
17	1-1		INDOOR UL CP W ISOLATOR MX	15	10	14 AWG	7	0.300		9.25	0.25							0.052	0.260	38.870
18	1-1		MX RELAY IAM	16	10	14 AWG	8	0.300		9.25								0.052	0.010	39.129
19	1-1		MX RELAY IAM	17	10	14 AWG	9	0.300		9.25								0.052	0.010	39.139
20	1-1		MX RELAY IAM	18	10	14 AWG	10	0.300		9.25								0.053	0.010	39.148
21	1-1		MX DUAL INPUT IAM	19	10	14 AWG	11	0.250		9.25					0.026	005	38.661	0.053	0.010	39.158
22	1-1		ADDR WALL SOUNDER RED | High Volume	20	10	14 AWG	12	8.475		9.25	0.25				0.025		38.407	0.061	0.261	39.168
23	1-1		ADDR WALL SOUNDER RED | High Volume	21	10	14 AWG	13	8.475		9.25	0.25				0.017		38.153	0.070	0.263	39.429
24	1-1		ADDR WALL SOUNDER RED | High Volume	22	10	14 AWG	14	8.475		9.25	0.25				0.008		37.902	0.078	0.308	39.692
25	1-1		MX LOOP RETURN		40	14 AWG				9.25								0.078		40.000





Controls and Editing – Delete Selection

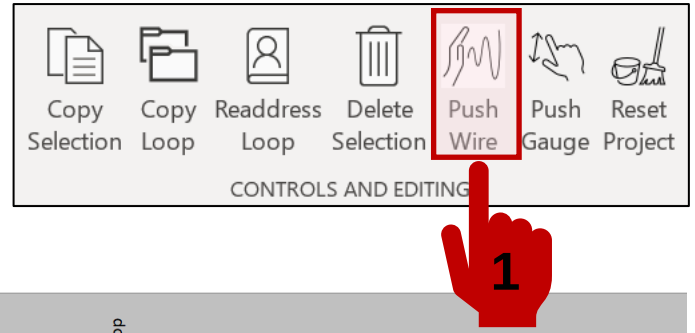
1) Highlight Selection to Delete
2) Click Delete Section
3) Click Yes to Confirm
4) Selection will be deleted



| | | |

Controls and Editing – Push Wire

1) Click Push Wire
2) Enter Wire Length and Click OK
3) Enter Loop No or Enter 'ALL' to update all Circuits and Click OK
4) NOTE: Before, Example based on Loop 1
5) NOTE: After, Wire Lengths have been updated to 20m

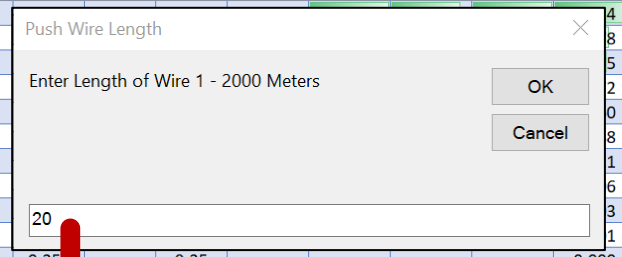


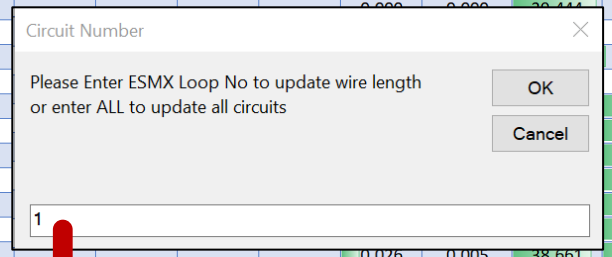
DETECTORS	PHOTO	11	PHOTO/HEAT	0	HEAT	9	PHOTO/HEAT/CO	0	DUCT	0		
BASES	STANDARD	5	CONTINUITY	0	SOUNDER	0	SOUNDER BEACON	15				
CALLS/PULLS	CP INDOOR	8	CP OUTDOOR	0	SINGLE	7	BREAKGLASS	3	PUSH PULL	0		
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	15	MONITOR	0		
	MINI IAM	0	DUAL IAM	5								
LP SOUNDERS	SOUNDER	12	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0				

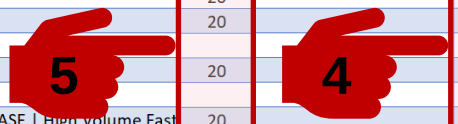
< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP			14 AWG									4		40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	20	10	14 AWG	1								8	0.014	39.986	0.003	0.001	37.838
3	1-1		MX PHOTO | 4 inch BASE UL	20	10	14 AWG	2								5	0.014	39.972	0.007	0.001	37.838
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast	20	10	14 AWG	3, 4								2	0.263	39.708	0.019	0.253	37.840
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast	20	10	14 AWG	5, 6								0	0.261	39.447	0.031	0.250	38.093
6	1-1		T-TAP/SPUR			14 AWG									8		39.447	0.042	0.008	38.343
7	1-1		MX PULL STATION DOUBLE ACTION	20	10	14 AWG	7								1	0.002	39.445	0.011	0.002	38.341
8	1-1		MX PULL STATION DOUBLE ACTION	20	10	14 AWG	8								6	0.001	39.444	0.006	0.001	38.340
9	1-1		T-TAP/SPUR			14 AWG									3		39.444	0.003		38.340
10	1-1		MX RELAY IAM	20	10	14 AWG	9								1	0.000	39.444	0.001	0.000	38.340
11	1-1		MX DUAL INPUT IAM	20	10	14 AWG	10	0.25		9.25								0.000	0.000	38.340
12	1-1		END			14 AWG				9.25										
13	1-1		MX PULL STATION DOUBLE ACTION	20	10	14 AWG	11	2		9.25								0.003	0.000	38.339
14	1-1		END			14 AWG				9.25										
15	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast	20	10	14 AWG	12, 13	9.05		9.25								0.051	0.259	38.351
16	1-1		INDOOR UL CP W ISOLATOR MX	20	10	14 AWG	14	0.300		9.25								0.051	0.259	38.610
17	1-1		INDOOR UL CP W ISOLATOR MX	20	10	14 AWG	15	0.300		9.25								0.052	0.260	38.870
18	1-1		MX RELAY IAM	20	10	14 AWG	16	0.300		9.25								0.052	0.010	39.129
19	1-1		MX RELAY IAM	20	10	14 AWG	17	0.300		9.25								0.052	0.010	39.139
20	1-1		MX RELAY IAM	20	10	14 AWG	18	0.300		9.25								0.053	0.010	39.148
21	1-1		MX DUAL INPUT IAM	20	10	14 AWG	19	0.250		9.25					0.026	0.005	38.661	0.053	0.010	39.158
22	1-1		ADDR WALL SOUNDER RED | High Volume	20	10	14 AWG	20	8.475		9.25	0.				0.025	0.255	38.407	0.061	0.261	39.168
23	1-1		ADDR WALL SOUNDER RED | High Volume	20	10	14 AWG	21	8.475		9.25					0.017	0.253	38.153	0.070	0.263	39.429
24	1-1		ADDR WALL SOUNDER RED | High Volume	20	10	14 AWG	22	8.475		9.25					0.008	0.252	37.902	0.078	0.308	39.692
25	1-1		MX LOOP RETURN	20	40	14 AWG				9.25								0.078		40.000

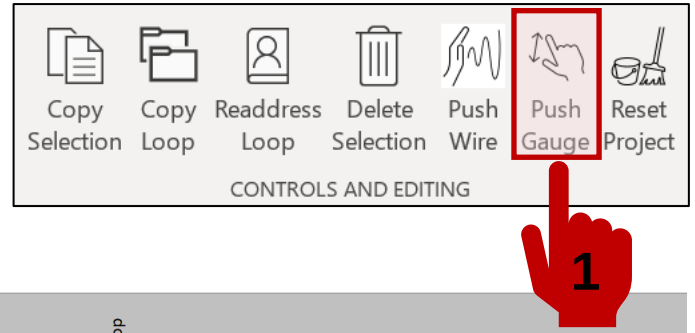






Controls and Editing – Push Gauge

1) Click Push Gauge
2) Enter No of Required Wire Gauge and Click OK
3) Enter Loop No or Enter ‘ALL’ to update all Circuits and Click OK
4) NOTE: Before, Example based on Loop 1
5) NOTE: After, Wire Gauges have been updated to 16 AWG

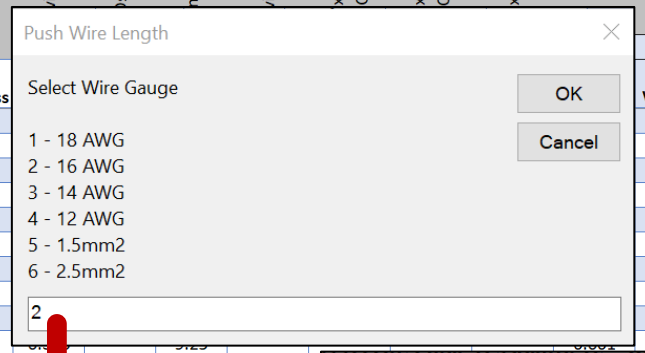


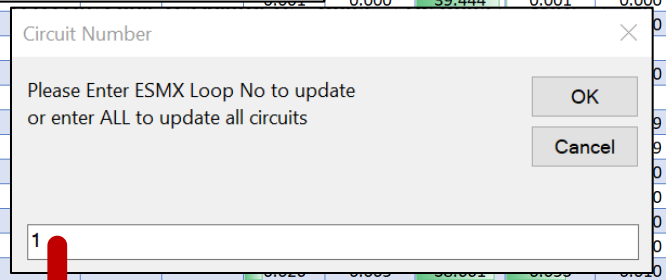
DETECTORS	PHOTO	11	PHOTO/HEAT	0	HEAT	9	PHOTO/HEAT/CO	0	DUCT	0		
BASES	STANDARD	5	CONTINUITY	0	SOUNDER	0	SOUNDER BEACON	15				
CALLS/PULLS	CP INDOOR	8	CP OUTDOOR	0	SINGLE	7	BREAKGLASS	3	PUSH PULL	0		
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	15	MONITOR	0		
	MINI IAM	0	DUAL IAM	5								
LP SOUNDERS	SOUNDER	12	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0				

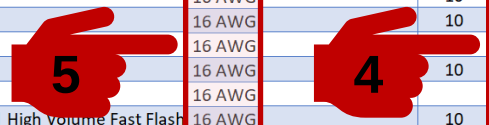
< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

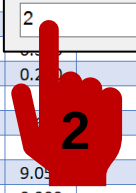
Select across these 4 columns to edit devices

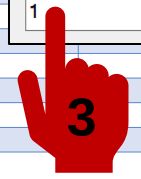
Item	Loop	Point Label	Description and Setting	Wire Gauge	Wire Length	Wire Gauge	Address	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP	16 AWG		14 AWG			40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	16 AWG	10	14 AWG	1	0.014	39.986	0.003	0.001	37.838
3	1-1		MX PHOTO | 4 inch BASE UL	16 AWG	10	14 AWG	2	0.014	39.972	0.007	0.001	37.838
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	16 AWG	10	14 AWG	3, 4	0.263	39.708	0.019	0.253	37.840
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	16 AWG	10	14 AWG	5, 6	0.261	39.447	0.031	0.250	38.093
6	1-1		T-TAP/SPUR	16 AWG		14 AWG			39.447	0.042	0.008	38.343
7	1-1		MX PULL STATION DOUBLE ACTION	16 AWG	10	14 AWG	7	0.002	39.445	0.011	0.002	38.341
8	1-1		MX PULL STATION DOUBLE ACTION	16 AWG	10	14 AWG	8	0.001	39.444	0.006	0.001	38.340
9	1-1		T-TAP/SPUR	16 AWG		14 AWG			39.444	0.003		38.340
10	1-1		MX RELAY IAM	16 AWG	10	14 AWG	9	0.000	39.444	0.001	0.000	38.340
11	1-1		MX DUAL INPUT IAM	16 AWG	10	14 AWG	10					38.340
12	1-1		END	16 AWG		14 AWG						
13	1-1		MX PULL STATION DOUBLE ACTION	16 AWG	10	14 AWG	11					38.339
14	1-1		END	16 AWG		14 AWG						
15	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	16 AWG	10	14 AWG	12, 13					38.351
16	1-1		INDOOR UL CP W ISOLATOR MX	16 AWG	10	14 AWG	14					38.610
17	1-1		INDOOR UL CP W ISOLATOR MX	16 AWG	10	14 AWG	15					38.870
18	1-1		MX RELAY IAM	16 AWG	10	14 AWG	16					39.129
19	1-1		MX RELAY IAM	16 AWG	10	14 AWG	17					39.139
20	1-1		MX RELAY IAM	16 AWG	10	14 AWG	18					39.148
21	1-1		MX DUAL INPUT IAM	16 AWG	10	14 AWG	19					39.158
22	1-1		ADDR WALL SOUNDER RED | High Volume	16 AWG	10	14 AWG	20	0.025	38.407	0.061	0.261	39.168
23	1-1		ADDR WALL SOUNDER RED | High Volume	16 AWG	10	14 AWG	21	0.017	38.153	0.070	0.263	39.429
24	1-1		ADDR WALL SOUNDER RED | High Volume	16 AWG	10	14 AWG	22	0.008	37.902	0.078	0.308	39.692
25	1-1		MX LOOP RETURN	16 AWG	40	14 AWG				0.078		40.000





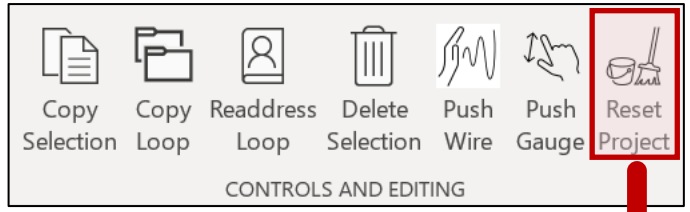


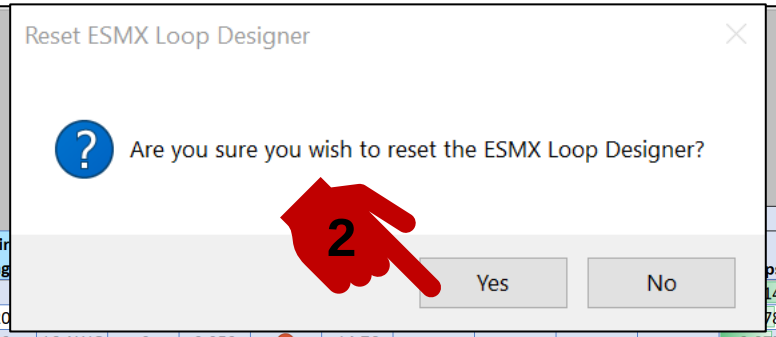




Controls and Editing – Reset Project

1) Click Reset Project
2) Click Yes to Confirm you wish to Reset the Project
3) Project is Reset





DETECTORS	PHOTO 11	PHOTO/HEAT 0	HEAT 9	PHOTO/HEAT/CO 0	DUCT 0							
BASES	STANDARD 5	CONTINUITY 0	SOUNDER 0	SOUNDER BEACON 15								
CALLS/PULLS	CP INDOOR 8	CP OUTDOOR 0	SINGLE 7	BREAKGLASS 3	PUSH PULL 0							
MODULES	SIGNAL IAM 0	ISOLATOR 0	MULTI IO 0	RELAY 15	MONITOR 0							
	MINI IAM 0	DUAL IAM 5										
LP SOUNDERS	SOUNDER 12	SDR/BEACON 0	WP SDR 0	WP SDR/BEACON 0								

< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP													40.000			
2	1-1		MX PHOTO | 4 inch BASE UL	20										0.078	0.046	39.954	0.003	0.002	37.621
3	1-1		MX PHOTO | 4 inch BASE UL	20	16 AWG	2	3.250		14.76					0.075	0.044	39.910	0.007	0.004	37.622
4	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	20	16 AWG	3, 4	12.050		14.76	0.25				0.072	0.292	39.617	0.019	0.261	37.626
5	1-1		MX HEAT | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	20	16 AWG	5, 6	12.050		14.76	0.25				0.060	0.285	39.332	0.031	0.250	37.887

DETECTORS	PHOTO 0	PHOTO/HEAT 0	HEAT 0	PHOTO/HEAT/CO 0	DUCT 0							
BASES	STANDARD 0	CONTINUITY 0	SOUNDER 0	SOUNDER BEACON 0								
CALLS/PULLS	CP INDOOR 0	CP OUTDOOR 0	SINGLE 0	BREAKGLASS 0	PUSH PULL 0							
MODULES	SIGNAL IAM 0	ISOLATOR 0	MULTI IO 0	RELAY 0	MONITOR 0							
	MINI IAM 0	DUAL IAM 0										
LP SOUNDERS	SOUNDER 0	SDR/BEACON 0	WP SDR 0	WP SDR/BEACON 0								

< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable Ω	Isolator Ω	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP		16 AWG				14.76			420				40.000			
Total																			

Device + LED in Alarm
LEDs on in Alarm
Ohms per kilometer
Devices with Isolators
Max 4000 per Loop 1 DC Unit = 0.25mA
Max Capacitance 1 AC Unit = 2nF
Max 2000 m per Loop

Johnson Controls

ESMX Loop Designer Cell Fill Color Codes

ESMX Loop Designer Cell Fill Color Codes

GREEN = GOOD
CIRCUIT VALUE OK

AMBER = CAUTION
CIRCUIT VALUE BETWEEN
80% - 100% OF MAX

RED = STOP
IF ANY CELLS ARE RED
CIRCUIT IS DEAD.

DETECTORS	PHOTO	300	PHOTO/HEAT	0	HEAT	50	PHOTO/HEAT/CO	0	DUCT	0		
BASES	STANDARD	250	CONTINUITY	0	SOUNDER	100	SOUNDER BEACON	0				
CALLS/PULLS	CP INDOOR	0	CP OUTDOOR	0	SINGLE	0	BREAKGLASS	0	PUSH PULL	0		
MODULES	SIGNAL IAM	0	ISOLATOR	0	MULTI IO	0	RELAY	0	MONITOR	0		
	MINI IAM	0	DUAL IAM	0								
LP SOUNDERS	SOUNDER	0	SDR/BEACON	0	WP SDR	0	WP SDR/BEACON	0				

< 80% of maximum allowed
80 -100% of maximum allowed
> 100% of maximum allowed

Select across these 4 columns to edit devices

Item	Loop	Point Label	Description and Setting	Wire Length	Wire Gauge	Address	Device mA	LEDs On	Cable	Isolator	Loop DC Units	Available AC Units	Total Wire	Left Feed Amps	Left Feed Volt Drop	Left Feed Volts at Device	Right Feed Class A Amps	Right Feed Class A Volt Drop	Right Feed Volts at Dev Cls A
1	1-1		ESMX LOOP		16 AWG				14.76		4910	245	1000	1.228		40.000			
2	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	1	27.250		9.25					1.228	0.227	39.773	0.027	0.005	23.016
3	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	2	27.250		9.25					1.200	0.222	39.551	0.055	0.01	23.021
4	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	3	27.250		9.25					1.173	0.217	39.334	0.082	0.0	23.031
5	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	4	27.250		9.25					1.146	0.212	39.122	0.109		23.046
6	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	5	27.250		9.25					1.119	0.207	38.915	0.136		23.066
7	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	6	24.250		9.25					1.091	0.202	38.713	0.161		23.092
8	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	7	24.250		9.25					1.067	0.197	38.515	0.185	0.034	23.121
9	1-1													1.043	0.193	38.322	0.209	0.039	23.155
10	1-1													1.019	0.188	38.134	0.233	0.043	23.194
11	1-1													0.994	0.184	37.950	0.258	0.048	23.237
12	1-1													0.970	0.179	37.771	0.282	0.052	23.285
13	1-1													0.946	0.175	37.596	0.306	0.057	23.337
14	1-1													0.922	0.171	37.425	0.330	0.061	23.394
15	1-1													0.897	0.166	37.259	0.355	0.066	23.455
16	1-1													0.873	0.162	37.097	0.379	0.070	23.520
17	1-1													0.849	0.157	36.940	0.403	0.075	23.590
18	1-1													0.825	0.153	36.788	0.427	0.079	23.665
19	1-1													0.800	0.148	36.640	0.452	0.084	23.744
20	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	19	24.250		9.25					0.776	0.144	36.496	0.476	0.088	23.828
21	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	20	24.250		9.25					0.752	0.139	36.357	0.500	0.093	23.916
22	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	21	24.250		9.25					0.728	0.135	36.222	0.524	0.097	24.008
23	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	22	24.250		9.25					0.703	0.130	36.092	0.549	0.101	24.105
24	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	23	24.250		9.25					0.679	0.126	35.967	0.573	0.106	24.207
25	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	24	24.250		9.25					0.655	0.121	35.845	0.597	0.110	24.313
26	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	25	24.250		9.25					0.631	0.117	35.729	0.621	0.115	24.423
27	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	26	24.250		9.25					0.606	0.112	35.617	0.646	0.119	24.538
28	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	27	24.250		9.25					0.582	0.108	35.509	0.670	0.124	24.658
29	1-1		MX PHOTO | LP SOUNDER BASE 85DB @ 10FT | Fixed Volume	10	14 AWG	28	24.250		9.25					0.558	0.103	35.406	0.694	0.128	24.781

3a

3b

3c

1

2

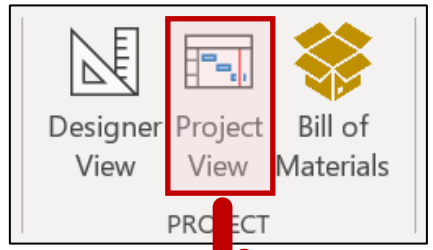
1) Loop DC Units, Available AC Units and Total Wire is Shown at the Loop Level Per Loop
2) Amps, and Volts at Device is Shown at the Point Level Per Device
3) NOTE: In this Example Loop 1 has Failed:
   a) Total Amps has been exceeded (Show at the Device Level)
   b) DC units has been exceeded (Shown at the Loop Level)
   c) Volts at Device is below the Minimum (Shown at the Device Level)

ESMX Loop Designer Project Menu

Project – Project View

1) Click Project View
2) Switches to Project View Sheet
3) Enter Circuit No to view Loop Information
4) Click to Print Project – This will enable Print Preview first.

NOTE: This sheet has been formatted for landscape printing which can be used in Project Submittals and/or Project Handover Documentation



Circuit Number: 1

Project Name: Example Project
Customer Name:
Project Location:

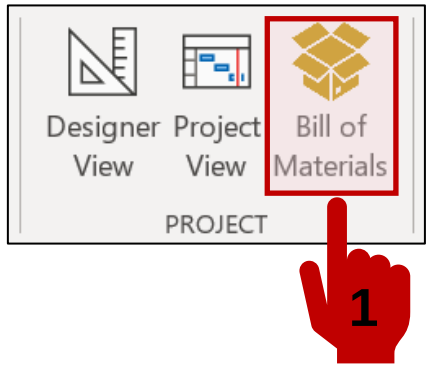
Click here to Print Project View

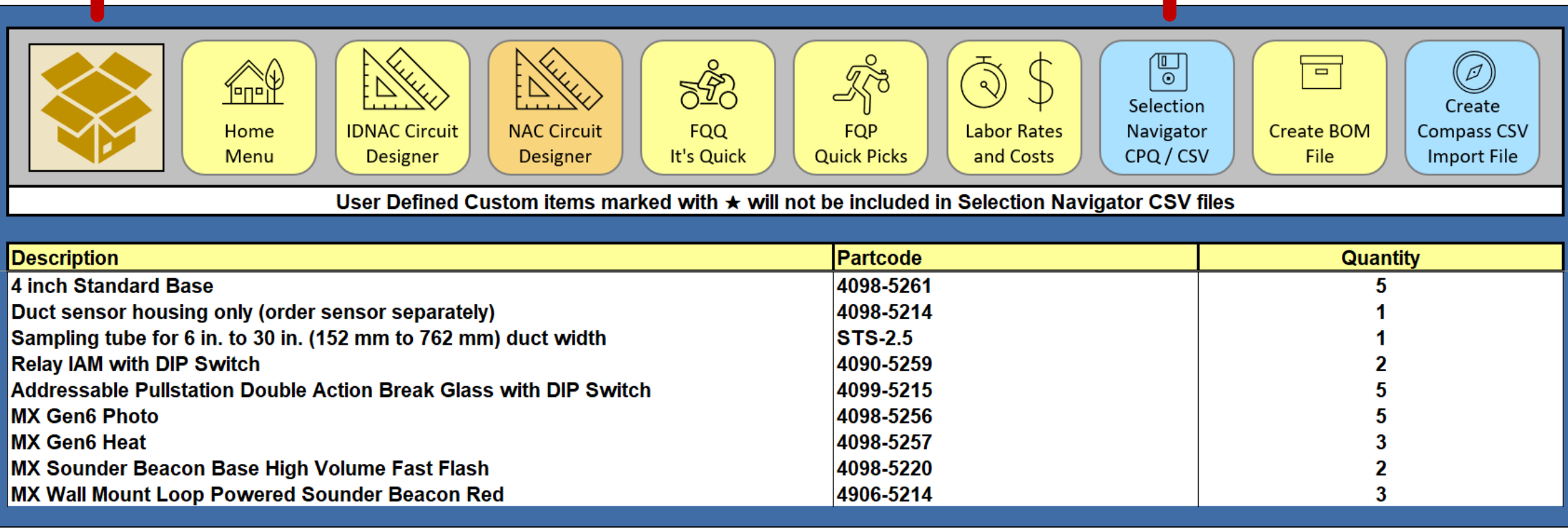
Project Phase:
Prepared By: Jason Crouch
Date: 11/10/2023

										Left Feed Calculations			Right Feed Calculations		
Item	Point Label	Loop	Address	Devices and Setting	Wired To	Wire Length	Wire Gauge	Device mA		Amps	Volt Drop	Volts at Device	Amps	Volt Drop	Volts at Device
1		1-1		MX LOOP			14 AWG			0.088		40.000			
2		1-1	1	MX HEAT | 4 inch BASE UL	MX LOOP	20	14 AWG	3		0.088	0.036	39.964	0.003	0.001	37.940
3		1-1	2	MX HEAT | 4 inch BASE UL	1	20	14 AWG	3		0.085	0.034	39.930	0.007	0.003	37.942
4		1-1	5, 12	MX PHOTO | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	2	20	14 AWG	12		0.082	0.283	39.647	0.019	0.257	37.944
5		1-1	20	MX PULL STATION DOUBLE ACTION	5, 12	20	14 AWG	6		0.070	0.028	39.619	0.024	0.010	38.202
6		1-1	21	MX PULL STATION DOUBLE ACTION	20	20	14 AWG	6		0.064	0.026	39.593	0.030	0.012	38.211
7		1-1	22	DUCT DETECTOR | SMOKE SNSOR | SAMPLE TUBE 6 to 30 INCHES	21	20	14 AWG	0		0.058	0.024	39.570	0.030	0.012	38.223
8		1-1	23	MX RELAY IAM	22	20	14 AWG	0		0.058	0.023	39.546	0.030	0.012	38.236
9		1-1	24	MX DUAL INPUT IAM	23	20	14 AWG	0		0.058	0.023	39.523	0.031	0.012	38.248
10		1-1	25	MX DUAL INPUT IAM	24	20	14 AWG	0		0.058	0.023	39.500	0.031	0.012	38.260
11		1-1	26	ADDR WALL A/V RED | High Volume Fast Flash	25	20	14 AWG	13		0.057	0.273	39.227	0.044	0.268	38.272
12		1-1	27	ADDR WALL A/V RED | High Volume Fast Flash	26	20	14 AWG	13		0.044	0.268	38.959	0.057	0.273	38.540
13		1-1	16	MX PHOTO | 4 inch BASE UL	27	20	14 AWG	0		0.031	0.013	38.946	0.057	0.023	38.813
14		1-1	17	MX PHOTO | 4 inch BASE UL	16	20	14 AWG	0		0.031	0.013	38.934	0.057	0.023	38.836
15		1-1	6	MX PULL STATION DOUBLE ACTION	17	20	14 AWG	3		0.031	0.012	38.921	0.060	0.024	38.859
16		1-1	30	ADDR WALL A/V RED | High Volume Fast Flash	6	20	14 AWG	13		0.028	0.261	38.660	0.073	0.279	38.883
17		1-1	8	MX PULL STATION DOUBLE ACTION	30	20	14 AWG	3		0.015	0.006	38.654	0.076	0.030	39.163
18		1-1	9	MX DUAL INPUT IAM	8	20	14 AWG	0		0.013	0.005	38.649	0.076	0.031	39.193
19		1-1	3	MX HEAT | 4 inch BASE UL	9	20	14 AWG	0		0.012	0.005	38.644	0.076	0.031	39.224
20		1-1	4, 7	MX PHOTO | ADDR LP SOUNDER BEACON BASE | High Volume Fast Flash	3	20	14 AWG	9		0.012	0.255	38.389	0.085	0.284	39.254
21		1-1	13	MX PULL STATION DOUBLE ACTION	4, 7	20	14 AWG	3		0.003	0.001	38.387	0.088	0.035	39.538
22		1-1	10	MX DUAL INPUT IAM	13	20	14 AWG	0		0.001	0.000	38.387	0.088	0.035	39.574
23		1-1	11	MX RELAY IAM	10	20	14 AWG	0		0.000	0.000	38.387	0.088	0.391	39.609
24		1-1		MX LOOP RETURN	11	220	14 AWG						0.088		40.000

Project – Bill of Materials

1) Click Project View
2) Switches to Bill of Materials Sheet
3) Click Button to Create a CSV File which can be uploaded to the File Import Product Selector in Selection Navigator

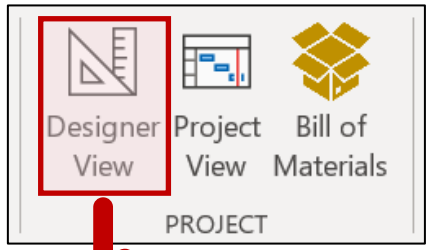




Description	Partcode	Quantity
4 inch Standard Base	4098-5261	5
Duct sensor housing only (order sensor separately)	4098-5214	1
Sampling tube for 6 in. to 30 in. (152 mm to 762 mm) duct width	STS-2.5	1
Relay IAM with DIP Switch	4090-5259	2
Addressable Pullstation Double Action Break Glass with DIP Switch	4099-5215	5
MX Gen6 Photo	4098-5256	5
MX Gen6 Heat	4098-5257	3
MX Sounder Beacon Base High Volume Fast Flash	4098-5220	2
MX Wall Mount Loop Powered Sounder Beacon Red	4906-5214	3

Project – Designer View

1) Click Designer View
2) Returns to ESMX Loop Designer Sheet



| | | |

Thank You